



## Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Abrin</b>  Abrin toxin – Abrinine biomarker	Clinical	<b>Blood:</b> Not available at DPHL or CDC				
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	LC/MS/MS: available*	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	*Method available through LRN network – anticipated at DPHL Abrinine biomarker determination
		<b>Other fluids:</b> Not available at DPHL or CDC				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	LC/MS/MS: not available* Immunoassay: not available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	*Method available through LRN network – anticipated at DPHL Abrinine biomarker determination
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	LC/MS/MS: not available* Immunoassay: not available	Store at room temperature in secondary container	2 -4 days	*Method available through LRN network – anticipated at DPHL Abrinine biomarker determination
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	LC/MS/MS: not available* Immunoassay: not available	Store at room temperature in secondary container	2 -4 days	*Method available through LRN network – anticipated at DPHL Abrinine biomarker determination
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b> <b>Methods available at FERN labs</b>	LC/MS/MS: not available** Immunoassay: not available	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b>  **Methods available at FERN labs

Notify DPHL of any field characterization testing performed

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<b>Antimony</b>  Antimony salts Antimony containing compounds	Clinical	<b>Blood:</b> Not available at DPHL				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container		Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container		Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b>	ICP/MS: not available** GFAA: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b>  **Methods available at FERN labs

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<b>Arsenic</b>  Arsenic salts Arsenic producing compounds	Clinical	<b>Blood:</b> Not available at DPHL <b>currently</b> Collect 3x4mL (min. 12 mL) in plastic purple top K3EDTA blood tube Collect 1x4mL plastic green top lithium heparin blood tube	ICP/MS: not available currently	Refrigerate at 2-8°C following IATA PI 650 & CDC Chemical Exposure Guidelines		Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS - DRC: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Speciation method available through LRN network
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available Test Strips: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available Test Strips: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available Test Strips: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC FERN method under development</b>	ICP/MS: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> **Methods available at FERN labs

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<b>Barium</b>  Barium salts Barium containing compounds	Clinical	<b>Blood:</b> Not available at DPHL currently				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC FERN method under development</b>	ICP/MS: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> **Methods available at FERN labs

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<b>Beryllium</b>  Beryllium salts Beryllium containing compounds	Clinical	<b>Blood:</b> Not available at DPHL currently				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b>	ICP/MS: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> **Methods available at FERN labs

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<b>Cadmium</b>  Cadmium salts Cadmium containing compounds	Clinical	<b>Blood:</b> Collect 3x4mL (min. 12 mL) in plastic purple top K3EDTA blood tube Collect 1x4mL in plastic green top lithium heparin blood tube	ICP/MS : available	Refrigerate at 2-8°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC FERN method under development</b>	ICP/MS: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> **Methods available at FERN labs

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<b>Cesium</b>  Cesium salts Cesium containing or producing compounds	Clinical	<b>Blood:</b> Not available at DPHL currently				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b>	ICP/MS: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> **Methods available at FERN labs

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<b>Chromium</b>  Chromium salts Chromium containing compounds or materials	Clinical	<b>Blood:</b> Collect 3x4mL (min. 12 mL) in plastic purple top K3EDTA blood tube Collect 1x4mL in plastic green top lithium heparin blood tube	ICP/MS: not available at DPHL	Refrigerate at 2-8°C following IATA PI 650 & CDC Chemical Exposure Guidelines		Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS - DRC: not available at DPHL	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Speciation method available through LRN network
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC FERN method under development</b>	ICP/MS: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> **Methods available at FERN labs

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<b>Cobalt</b>  Cobalt salts Cobalt containing compounds	Clinical	<b>Blood:</b> Not available at DPHL currently				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b>	ICP/MS: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> **Methods available at FERN labs

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<b>Cyanide</b>  Cyanide salts Cyanogen chloride Isocyanide Cyanide producing compounds Cyanide	Clinical	<b>Blood:</b> Collect 3x4mL (min. 12 mL) in plastic purple top K3EDTA blood tube Collect 1x4mL in plastic green top lithium heparin blood tube	GC/MS: available	Refrigerate at 2-8°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Collection prior to antidote administration is preferred but not required
		<b>Urine:</b> Not available				
		<b>Other fluids:</b> Not available at DPHL				
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW drinking water kit	GC/MS: available Test Strips: available Wet Chemistry: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	GC/MS: available Test Strips: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	GC/MS: available Test Strips: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL	Test Strips: available			Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b> <b>Methods available at FERN labs</b>	GC/MS: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b>  **Methods available at FERN labs

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<b>Lead</b>  Lead salts Lead containing compounds or materials (paints, polishes, glass or stem ware)	Clinical	<b>Blood:</b> Collect 3x4mL (min. 12 mL) in plastic purple top K3EDTA blood tube Collect 1x4mL in plastic green top lithium heparin blood tube  <b>Pediatrics:</b> Collect 0.500 mL via capillary finger stick in 1 mL purple top K3EDTA microtainer	ICP/MS: available GFAA: available	Refrigerate at 2-8°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC FERN method under development</b>	ICP/MS: not available** GFAA: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b>  **Methods available at FERN labs

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<b>Lewisites</b>  L, HL	Clinical	<b>Blood:</b> Not available at DPHL or CDC				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	GC/MS/MS: available*	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Utilizes CVAA hydrolysis product for detection *Method available through LRN network
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	GC/MS/MS: not available GC/MS: not available	Refrigerate at 2-8°C following ODW and EPA guidelines	2-4 days	Utilizes CVAA hydrolysis product for detection *Method available through LRN network
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	GC/MS/MS: not available GC/MS: not available	Store at room temperature in secondary container	2 -4 days	Utilizes CVAA hydrolysis product for detection *Method available through LRN network
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	GC/MS/MS: not available GC/MS: not available	Store at room temperature in secondary container	2 -4 days	Utilizes CVAA hydrolysis product for detection *Method available through LRN network
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
		<b>No method available at DPHL or CDC or FDA</b>	GC/MS/MS: not available GC/MS: not available			<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b>
	Food					

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<b>Mercury</b>  Mercury salts Mercury containing or producing compounds (old thermometers, plating supplies)	Clinical	<b>Blood:</b> Collect 3x4mL (min. 12 mL) in plastic purple top K3EDTA blood tube	ICP/MS: available FIMS: available GFAA: available	Refrigerate at 2-8°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Contact DPHL for further assistance
		<b>Urine:</b> Not available at DPHL	ICP/MS: not available		12-36 hrs	Contact DPHL for further assistance
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC FERN method under development</b>	ICP/MS: not available** GFAA: not available** FIMS: not available	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b>  **Methods available at FERN labs

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<b>Nerve Agents</b>  Organo-phosphorous Nerve Agents  Sarin (GB), Soman (GD), Cyclohexylsarin (GF), Russian VX (rVX), VX  Organo-phosphorous Pesticides	Clinical	<b>Blood:</b> Not available at DPHL or CDC				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	LC/MS/MS: available*	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	*Method available through LRN network – anticipated at DPHL
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	GC/MS: not available* LC/MS/MS: not available* Wet Chemistry: available Test strip/triage: available	Refrigerate at 2-8°C following ODW and EPA guidelines	2-4 days	Contact DPHL for further assistance *Method available through LRN network – anticipated at DPHL
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	GC/MS: not available* LC/MS/MS: not available* Wet Chemistry: available Test strip/triage: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance *Method available through LRN network – anticipated at DPHL
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	GC/MS: not available* LC/MS/MS: not available* Wet Chemistry: available Test strip/triage: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance *Method available through LRN network – anticipated at DPHL
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b> <b>Methods available at FERN labs</b>	LC/MS/MS: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> **Method available through FERN network

Notify DPHL of any field characterization testing performed

Submitters must contact DPH Environmental Health Evaluation Branch concerning any suspected clinical exposure, environmental release, or suspected food contamination.





## Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Nitrogen Mustards</b>  HN1 (bis(2-chloroethyl)ethyl amine), HN2 (bis(2-chloroethyl)methyl amine), and HN3 (tris(2-chloroethyl)amine)	Clinical	<b>Blood:</b> Not available at DPHL or CDC				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	LC/MS/MS: available*	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Utilizes hydrolysis products EDEA, MEDEA, and TEA for detection *Method available through LRN network – anticipated at DPHL
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	LC/MS/MS: available*	Refrigerate at 2-8°C following ODW and EPA guidelines	2-4 days	Contact DPHL for further assistance Utilizes hydrolysis products EDEA, MEDEA, and TEA for detection *Method available through LRN network – anticipated at DPHL
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	LC/MS/MS: available*	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance Utilizes hydrolysis products EDEA, MEDEA, and TEA for detection *Method available through LRN network – anticipated at DPHL
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	LC/MS/MS: available*	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance Utilizes hydrolysis products EDEA, MEDEA, and TEA for detection *Method available through LRN network – anticipated at DPHL
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC or FDA</b>	LC/MS/MS: not available			<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b>

Notify DPHL of any field characterization testing performed

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## Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Pesticides</b> Dialkylphosphate, Thiophosphate, Dithiophosphate Metabolites of Organophosphate Pesticides <b>General Pesticide Screen</b> Alachlor, Arochlor (1016, 1221, 1232, 1232, 1248, 1254, 1260), Aldrin, Atrazine, Butachlor, Chlorbenzilate, Chloradane, Chloroneb, Chlorothalonil, Cyanazine, DCPA, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, 4,4'-Dibromobiphenyl, Dieldrin, Endosulfan I, II, Endrin, Endrin Aldehyde, Etridiazole, HCH, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Methoxychlor, Metolochlor, Metribuzin, Permethrin, Propachlor, Simazine, Tribfluralin, Toxaphene	Clinical	<b>Blood:</b> Not available at DPHL or CDC				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	GC/MS: available*	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	*Method available through LRN network – anticipated at DPHL
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	GC: available GC/MS: not available* LC/MS/MS: not available* Test strip/triage: available	Refrigerate at 2-8°C following ODW and EPA guidelines	2-4 days	Contact DPHL for further assistance *Method available through eLRN network – anticipated at DPHL
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	GC/MS: not available* LC/MS/MS: not available* Wet Chemistry: available Test strip/triage: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance *Method available through eLRN network – anticipated at DPHL
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	GC/MS: not available* LC/MS/MS: not available* Wet Chemistry: available Test strip/triage: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance *Method available through eLRN network – anticipated at DPHL
		<b>Gases:</b> Not available at DPHL				
	Food	<b>No method available at DPHL or CDC</b> <b>Methods available at FERN labs</b>	GC/MS: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> ** Method available through FERN network

Notify DPHL of any field characterization testing performed

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**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Platinum</b>  Platinum salts Platinum containing compounds	Clinical	<b>Blood:</b> Not available at DPHL currently				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b>	ICP/MS: available*	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> **Method available through FERN

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**DELAWARE HEALTH AND SOCIAL SERVICES**  
**Division of Public Health**  
**Laboratory**

**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES*		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Radioactive Elements</b>  Alpha spectroscopy: Americium 241 Californium 252 Plutonium 238 Radium 226 Uranium 238**  Beta counting: Strontium 90**  Gamma Spectroscopy: Cesium 137** Americium 241 Cobalt 60** Europium 154 Iridium 192** Ruthenium 103 Ruthenium 106	Clinical	<b>Blood:</b> Not available at DPHL				
		<b>Urine:</b> Not available at DPHL** Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available** Test strip/triage: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available** Test strip/triage: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available** Test strip/triage: available	Store at room temperature in secondary container	2 -4 days	
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available** Test strip/triage: available	Store at room temperature in secondary container	2 -4 days	
		<b>Gases:</b> Not available at DPHL	Test strip/triage: available****			****Field kits for Radon 222
	Food	<b>No method available at DPHL or CDC or FDA</b> <b>Methods available at contract Radiation labs</b>	ICP/MS: not available*** Test strip/triage: available	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	Contract laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> ***Methods available at DOE/Rad. labs

\*DPHL will refer radiological testing to a radiological contract laboratory through DEMA. All specimens received at DPHL must be screened for radioactivity prior to submission and/or acceptance by DPHL personnel. Notify DPHL of any field characterization testing performed.

\*\*Low level contamination analysis is available via ICP/MS available for: Uranium 238, Cobalt 60, Cesium 137, Iridium 192, Strontium 90. Other testing must be coordinated with DPHL and DEMA.

Submitters must contact DPH Environmental Health Evaluation Branch concerning any suspected clinical exposure, environmental release, or suspected food contamination.



**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Ricin</b>  Ricin toxin - biomarker	Clinical	<b>Blood:</b> Not available at DPHL or CDC				
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	LC/MS/MS: available*	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	*Method available through LRN network – anticipated at DPHL Ricinine biomarker determination
		<b>Other fluids:</b> Not available at DPHL or CDC				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	LC/MS/MS: not available* Immunoassay: not available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	*Method available through LRN network – anticipated at DPHL
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	LC/MS/MS: not available* Time-resolved fluorescence assay (TRF): available** Real-Time PCR: available***	Store at room temperature in secondary container	2 -4 days	*Method available through LRN network – anticipated at DPHL
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	LC/MS/MS: not available* Time-resolved fluorescence assay (TRF): available** Real-Time PCR: available***	Store at room temperature in secondary container	2 -4 days	*Method available through LRN network – anticipated at DPHL
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b> <b>Methods available at FERN labs</b>	LC/MS/MS: not available** Immunoassay: not available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Epidemiology Section of DPH concerning any suspected food contamination.</b> **Methods available at FERN labs

\*\*DNA from the Ricin communis plant is detected using PCR method

\*\*\* Ricin toxin is detected using the TRF method

Notify DPHL of any field characterization testing performed

Submitters must contact DPH Environmental Health Evaluation Branch concerning any suspected chemical or radiological clinical exposure, environmental release, or suspected food contamination.



**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Riot Agents</b>  chloroacetophenone (CN) chlorobenzylidenemalonitrile (CS), chloropicrin (PS), bromobenzylcyanide (CA), dibenzoxazepine (CR)  <b>Vomiting Agents</b> Adamsite (DM)	Clinical	<b>Blood:</b> Not available at DPHL or CDC				
		<b>Urine:</b> Not available at DPHL or CDC	GC/MS: not available**			**Method anticipated available through LRN network 06/2008
		<b>Other fluids:</b> Not available at DPHL or CDC				
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	GC/MS: not available*	Refrigerate at 2-8°C following ODW and EPA guidelines	2-4 days	*Method available through eLRN network
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	GC/MS: not available*	Store at room temperature in secondary container	2 -4 days	*Method available through eLRN network
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	GC/MS: not available*	Store at room temperature in secondary container	2 -4 days	*Method available through eLRN network
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC or FDA</b>	GC/MS: not available			<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b>

Notify DPHL of any field characterization testing performed

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**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Selenium</b>  Selenium salts Selenium containing compounds (Vitamin supplements)	Clinical	<b>Blood:</b> Not available at DPHL currently				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS - DRC: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Speciation method available through LRN network
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b>	ICP/MS: available*	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> * Method available through FERN

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**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Sulfur Mustards</b>  HD, H, HT, HL, HQ	Clinical	<b>Blood:</b> Not available at DPHL or CDC				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	GC/MS/MS: available*	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Utilizes SBMTE metabolite for detection *Method available through LRN network
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	GC/MS/MS: not available GC/MS: not available	Refrigerate at 2-8°C following ODW and EPA guidelines	2-4 days	*Method available through e-LRN network
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	GC/MS/MS: not available GC/MS: not available	Store at room temperature in secondary container	2 -4 days	*Method available through e-LRN network
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	GC/MS/MS: not available GC/MS: not available	Store at room temperature in secondary container	2 -4 days	*Method available through e-LRN network
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC or FDA</b>	GC/MS/MS: not available GC/MS: not available			<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b>

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**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Thallium</b>  Thallium salts Thallium containing compounds	Clinical	<b>Blood:</b> Not available at DPHL currently				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b>	ICP/MS: available*	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> *Method available through FERN.

Notify DPHL of any field characterization testing performed

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**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Tungsten</b>  Tungsten salts Tungsten containing compounds	Clinical	<b>Blood:</b> Not available at DPHL currently	ICP/MS: not available			Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b>	ICP/MS: available*	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> *Method available through FERN.

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**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Uranium</b>  Uranium salts Uranium containing compounds or materials (Old orange Fiesta ware, certain rock formations)	Clinical	<b>Blood:</b> Not available at DPHL currently				Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS: available Hand-held screening: available (must be confirmed by ICP/MS technique)	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Speciation method available through LRN network
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available Hand-held screening: available (must be confirmed by ICP/MS technique)	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available Hand-held screening: available (must be confirmed by ICP/MS technique)	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available Hand-held screening: available (must be confirmed by ICP/MS technique)	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b>	ICP/MS: not available* Hand-held screening: available (must be confirmed by ICP/MS technique)	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b>  *Method available through FERN

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**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>Vanadium</b>  Vanadium salts Vanadium containing compounds or materials	Clinical	<b>Blood:</b> Collect 3x4mL (min. 12 mL) in plastic purple top K3EDTA blood tube	ICP/MS: not available at DPHL	Refrigerate at 2-8°C following IATA PI 650 & CDC Chemical Exposure Guidelines		Contact DPHL for further assistance
		<b>Urine:</b> Collect minimum 25-50mL in plastic urine specimen cup with o-ring	ICP/MS - DRC: not available at DPHL	Freeze at -20 to -80°C following IATA PI 650 & CDC Chemical Exposure Guidelines	12-36 hrs	Speciation method available through LRN network
		<b>Other fluids:</b> Not available at DPHL				Contact DPHL for further assistance
	Environmental	<b>Drinking Water:</b> Collect 1 bottle (500mL) utilizing DPHL/ODW trace metals drinking water kit	ICP/MS: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	ICP/MS: available	Store at room temperature in secondary container	2 -4 days	Contact DPHL for further assistance
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b>	ICP/MS: available*	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> *Method available through FERN.

Notify DPHL of any field characterization testing performed

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**DELAWARE HEALTH AND SOCIAL SERVICES**  
**Division of Public Health**  
**Laboratory**

**Delaware Public Health Laboratory Specimen Collection Procedures for Identification of Chemical Exposure Materials**

CHEMICAL OR AGENT	SPECIMEN SELECTION FROM SAMPLES		TEST METHOD	TRANSPORT MEDIUM/ INSTRUCTIONS	PROCESSING TIME	COMMENTS
<b>VOCs</b>  Volatile Organic Compounds  63 analytes in drinking water 10 analytes in blood 38 analytes in blood through LRN network	Clinical	<b>Blood:</b> Collect 3x4mL (min. 12 mL) in plastic purple top K3EDTA blood tube Collect 1x4mL in plastic green top lithium heparin blood tube	GC/MS: available*	Refrigerate at 2-8°C following IATA PI 650 & CDC Chemical Exposure Guidelines	24-48 hrs	2 blank tubes from each lot and type must also be provided. *Method available through LRN network – anticipated at DPHL
		<b>Urine:</b> Not available				
		<b>Other fluids:</b> Not available				
	Environmental	<b>Drinking Water:</b> Collect 3 bottles (40mL each) utilizing DPHL/ODW drinking water kit	GC/MS: available Wet Chemistry: available Test strip/triage: available	Refrigerate at 2-8°C following ODW and EPA guidelines	12-36 hrs	Contact DPHL for further assistance. 3 field blank bottles must also be prepared. Blanks are different based on chlorinated or non-chlorinated water.
		<b>Powders, solids, or semi-solids:</b> Collect minimum of 1 tablespoon of material in 15 or 50 mL plastic centrifuge tube	GC/MS: available Wet Chemistry: available Test strip/triage: available	Store at room temperature in secondary container	2 -4 days	Container blanks must also be provided for background analysis.
		<b>Liquids:</b> Collect a minimum of 1 tablespoon in 15 or 50 mL plastic centrifuge tube	GC/MS: available Wet Chemistry: available Test strip/triage: available	Store at room temperature in secondary container	2 -4 days	Container blanks must also be provided for background analysis.
		<b>Gases:</b> Not available at DPHL				Contact DPHL for further assistance
	Food	<b>No method available at DPHL or CDC</b> <b>**Methods available at FERN labs</b>	GC/MS: available**	Collect a minimum of 25 g of product double bagged in a leak proof, sterile container	FDA laboratory will notify DPHL who will notify submitter	<b>Submitter must contact Environmental Health Evaluation Branch concerning any suspected food contamination.</b> **Method available through FERN.

Notify DPHL of any field characterization testing performed

Submitters must contact DPH Environmental Health Evaluation Branch concerning any suspected clinical exposure, environmental release, or suspected food contamination.